

Response-Remarks

Claims 5 and 7-11 are pending in the application.

Claims 13-16 have been withdrawn from consideration.

Claims 5, 8, 9, 13 and 16 have been amended.

Response to Restriction

The Examiner has withdrawn claims 13-16 (Group II) from consideration as being distinct from claims 5 and 7-13 (Group I) because the Group I claims and Group II claims are related as combination and subcombination.

The basis for the restriction is that Claims 5 and 7-13 (Group I) are drawn to the combination of a sleeve and a *molded* skirt integrally formed on the sleeve whereas Claims 13-16 (Group II) are drawn to the sub-combination of a skirt and a sleeve integrally formed on the sleeve. The fact that claims 13-16 do not contain “molded” does not make claims 13-16 sub-combination claims. Claims 13-16 are still a *combination* of two elements – a sleeve and a skirt integrally formed on the sleeve.

The Examiner has taken the position that the molded limitation has not been given patentable weight. See page 4, 4th paragraph of the Office Action. This is further evidence that the Group I claims and the Group II claims are to the same combination.

The Group II claims do not place any further burden of the Examiner because the electrical connector art has already been searched and applied in the examination of this patent application as evidenced by the Examiner’s reliance on U.S. Patent 3,792,416 to Moulin.

In view of the above kindly withdraw the restriction requirement, reinstate claims 13-16 and examine these claims.

Response to Rejection of Claims 5 and 7-11 under 35 USC § 103(a)

Base claims 5, 8, and 9 have been amended in view of the rejection of claims 5 and 7-11 under 35 USC § 103(a) as being unpatentable over U.S. Patent 3,792,416 to Moulin in view of U.S. Patent 4,627,647 to Hauff.

The Moulin ‘416 patent, which is in the electrical connector art, represents the precise problem of the prior art that the invention overcomes, namely, the possible

wrinkling of the seal flange as explained in paragraphs in paragraphs [0002], [0003], [0004], [0005], [0006] and [0007] of the patent application.

In rejecting the claims, the Examiner states that the method of forming the device is not germane to the issue and consequently “molded” as a descriptor of the skirt has not been given any patentable weight. However, it is the shape of the molded skirt, not the forming process that distinguishes the invention of claims 5, 8 and 9 over the Moulin ‘416 reference.

This is now made clearer in amended base claims 5, 8 and 9 by reciting that the “sealing surface has substantially the same shape as the interior surface of the cavity prior to insertion into the cavity”

The Examiner recognizes that the Moulin ‘416 patent does not disclose that the “sealing surface has substantially the same shape as the interior surface of the cavity prior to insertion into the cavity”. See page 4, 5th paragraph of the Office Action.

The Hauff ‘647 patent discloses a wall feedthrough fitting for a conduit 1, such as a pipe, cable, or the like that extends through the cylindrical passage 2 of a concrete wall 3. The fitting comprises an elastomeric sleeve 4 and a two piece tightening ring 7 that has screw thread ridges 9. The elastomeric ring 4 has an annular groove 8 that tapers toward the open direction as best shown in figure 4 of the Hauff ‘647 patent.

The Hauff ‘647 patent is not clear if the conduit 1 is fit through the passage 2 first and then the elastomeric sleeve 4 is inserted into the end of the passage 2 or if the elastomeric sleeve 4 is fit into the end of the passage first. In any event, after the conduit 1 is permanently emplaced, the ring 7 is screwed into the groove 8 thereby tightening the assembly together and making a very hermetic seal. See column 3, lines 46-53 of the Hauff ‘647 patent.

The Examiner maintains that, “It would have been obvious at the time the invention was made to incorporate a skirt, as taught by Hauff in a sealing device as described by Moulin, in order to make a better sealing arrangement between the inside surface of the cavity and the sealing surface and to prevent loss in the sealing contact *because of excessive wrinkles.*” See page 5, 2nd paragraph of the Office Action.

The Examiner's opinion is also based on an observation that "Hauff teaches that it is well known in the art to have a skirt instead of having a flange that converts into a skirt". See page 5, last paragraph of the Office Action.

The Hauff '647 patent discloses a thick elongate sleeve 4 with a narrow tapered slot 8 as best shown in figure 4 of the Hauff '647 patent. The Hauff '647 patent does not mention a wrinkling problem. The mere fact that the Hauff '647 patent shows a thick elongate sleeve with a narrow tapered slot does teach that it is well known in the art to have a skirt instead of having a flange that converts into a skirt for any reason. In fact the *elongate length* of the portion of the thick elongate sleeve 4 of the Hauff '647 patent (that is outward of the narrow tapered slot 8) suggests away from the possibility that it is an alternative for a flange that converts into the outer portion of the thick elongate Hauff sleeve 4.

The only thing that Hauff '647 patent teaches with respect to sealing is the provision of a relatively thick elongate seal sleeve 4 having a narrow tapered slot 8 into which a ring 7 is screwed to improve the sealing. The modification proposed by the Examiner is not suggested by the two references themselves. Rather, the modification is hindsight reconstruction of the prior art using the applicant's invention as a guide.

Consequently amended base claims 5, 8 and 9 are clearly patentable over the applied references. This also applies to dependent claims 7, 10 and 11.

Claims 13 -16 are patentable

Base claims 13 and 16 have also been amended by reciting that the "sealing surface has substantially the same shape as the interior surface of the cavity prior to insertion into the cavity". Consequently base claims 13 and 16 are patentable over the applied references for the reasons given above.

Moreover, the secondary Hauff '647 patent when applied to base claims 13 and 16 is non-analogous art so that these claims are patentable over the applied references for another reason.

Two criteria have developed for determining whether prior art is analogous:

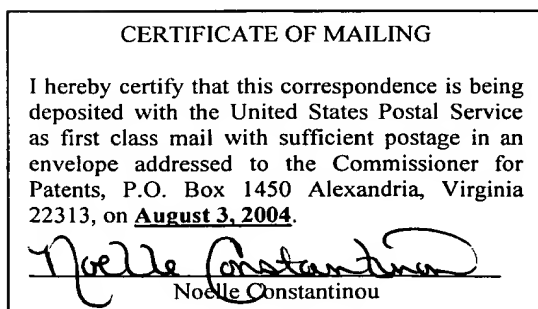
(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the inventor's field of endeavor, whether the reference is still pertinent to the particular problem with which the inventor is involved. *In re Clay*, 23 USPQ2d, 1058, 1060, (FedCir 1992).

As stated on page 1 of the patent application, Applicant's field of endeavor is high pressure seals used in electrical connectors, not the field of wall feed through fittings. Thus the Hauff '647 patent fails the first criterion of being from the same field of endeavor. Moreover, the wall feed through fitting of the Hauff '647 patent is not pertinent to the problem which applicant faced, which is the sealing loss as a result of the wrinkling of a flexible, radial flange, such as the Moulin flexible radial flange (150) when it is bent into sealing engagement with a sealing surface as shown in figures 7a through 7d of the Moulin '416 patent. Hence the Hauff '647 patent when applied to base claims 13 and 16 is non-analogous art that cannot be used in an obviousness rejection under 35 USC § 103(a).

Consequently base claims 13 and 16 are patentable for another second reason. This applies to dependent claims 14 and 15.

With respect to dependant claims 14 and 15, there is absolutely no suggestion in the two references to make the second integral section of the skirt shorter (claim 14) and make room for the wiping land (claim 15).

Please withdraw the restriction requirement, reinstate claims 13-16, enter the amendment under the provisions of 37 CFR § 1.116 and examine claims 5, 7-11, and 13-16 in view of the foregoing remarks and amendments.



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